example from De Morgan. "German intellect is an excellent thing, but when a German product is presented it must be analyzed. Most probably it is a combination of intellect (I) and tobacco-smoke (T). Certainly I_3T_1, and I_2T_1 occur; but I_1T_3 is more common, and I_2T_{15} and I_1T_{20} occur. In many cases metaphysics (M) occurs and I hold that $I_aT_bM_c$ never occurs without $b+c>2a$.

N.B.—Be careful, in analyzing the compounds of the three, not to confound T and M, which are strongly suspected to be isomorphic. Thus, $I_1T_3M_3$ may easily be confounded with I_1T_6. As far as I dare say anything, those who have placed *Hegel, Fichte,* etc., in the rank of the extenders of *Kant* have imagined T and M to be identical."

I have quoted freely from the volume under review, hoping thereby to convey something of the atmosphere that pervades it; but I realize fully that no limited number of quotations can adequately suggest the wealth and variety of ideas that it presents to the reader.

The author was very happy in the selection of material in this pioneer work, and has rendered a service to mathematical and non-mathematical readers.

The value of the work is greatly enhanced by the author's success in giving exact references to the quotations used, for in this way the Memorabilia becomes a guide to a much larger range of material "pertaining to mathematics, by poets, philosophers, statesmen, scientists, and mathematicians."

An excellent cross reference index of some 700 topics makes the material gathered very accessible.

GEO. N. BAUER.

PROBLEMS AND SOLUTIONS.

B. F. FINKEL, CHAIRMAN OF THE COMMITTEE.

PROBLEMS FOR SOLUTION.

ALGEBRA.

When this issue was made up solutions of 412 to 421 had been received. A solution of 406 is desired.

422. Proposed by W. D. CAIRNS, Oberlin College.

Find a solution of the equation $x^{x\sqrt{x}} = (x\sqrt{x})^x$.
(Adapted from Godfrey & Siddon's *Elementary Algebra.*)

423. Proposed by ELBERT H. CLARKE, Purdue University.

Show that the following formula is true for all positive integral values of k. The parenthetical symbols are defined as being the binomial coefficients. $\binom{k+1}{0} = 1$, by definition.

$$k^k\binom{k+1}{0} - (k-1)^k\binom{k+1}{1} + (k-2)^k\binom{k+1}{2} + \cdots + (-1)^{s-1}(k-s+1)^k\binom{k+1}{s-1} + \cdots + (-1)^k\binom{k+1}{k-1} = 1.$$